APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/241,735	02/02/99	KIMURA	H 1776/00034

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EXAMINER
FERRIS III,F

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 11/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)

1- File Copy

	Application No.		Applicant(s)	
Office Action Summary	09/241,735		KIMURA ET AL.	
	Examiner		Art Unit	
	Fred Ferris		2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. ·

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 February 1999</u> .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-34</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>15 February 1999</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> .   6) ☐ Other: .

DETAILED ACTION

1.   Claims 1 – 34 have been presented for examination. Claims 1-34 have been

examined and rejected.

Priority

2.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy has been made of record.

Specification

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)

(a)   The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

The specification contains numerous nonspecific statements. A few examples

are:

*Page 10, line 4 – "maintenance documentation information, **and the like**"*

*Page 18, line 6 –"language, e.g., C++ **or the like**".*

*Page 20, line 6 – "document information, **and the like**".*

The specification contains numerous grammatical errors and nonsense

statements. For example:

Page 13, line 24 states "On the other hand, as metrics of quantitative

complexity, cohesion and coupling that express the contents of modules are measured."

The disclosure is objected to because of the following informalities:

The specification includes a reference to Japanese patent applications (No. 9-

32415, 9-52452) as part of the claimed inventions description.

The incorporation of essential material in the specification by reference to a

foreign application or patent, or to a publication is improper. Applicant is required to

amend the disclosure to include the material incorporated by reference. The

amendment must be accompanied by an affidavit or declaration executed by the

applicant, or a practitioner representing the applicant, stating that the amendatory

material consists of the same material incorporated by reference in the referencing

application. See In re Hawkins, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); In re

Hawkins, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and In re Hawkins, 486 F.2d

577, 179 USPQ 167 (CCPA 1973).

Corrective action is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth in the objections to the specification. No algorithms are given and no analytical process is described. The specification makes reference to the claimed invention analyzing a computer program, and automatically generating program analysis information but does not specifically explain the process. For example:

Page 19, line 11 states; "The program analysis unit 20_2 executes an **analysis process** for graphically displaying a flow graph on the computer screen". The specific **analysis process** is not disclosed. Reference is made to the **analysis process** "analyzing by batch process using various kinds of **program analysis** information" P19-L24), and executing a **"predetermined analysis process"** (P20-L19) but no algorithm or methodology for the **analysis process** is given.

Since the claimed invention is not supported by either a concrete and tangible asserted utility or a well established utility, one skilled in the art clearly would not know how to use the claimed invention. Claims dependent on independent claims 1, 11, 13, 22, 24, and 33 inherit this defect.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-34 are rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being

clearly anticipated by U.S. Patent No. 6,282,701, Wygodny et al. While the specification

regarding the claimed invention is delinquent in the areas sited in paragraphs 3 and 4,

the examiner makes prior art rejections based the following observations.

Regarding independent claim 1 and dependent claims 2-10:

Wygodny discloses: (absract, figures 13, 14, 3A, 3B, 5, 6 7, summary of invention, and

detailed description of preferred embodiment)

Wygodny discloses a program analyzer method and apparatus having a

graphical user interface, which collects trace information for use in analyzing a

computer program. (a "trace" refers to the analysis information being obtained) The

tracing is performed without requiring modifications to the executable or source code

files. Trace data is collected according to instructions in a trace options file that is set

up through an interactive process by an operator. The trace data provides a graphical

representation of the collected (analyzed) data showing program flow, program calls,

and I/O information. (figure 3A, 3B, 5-7, 13-14) The system can trace multiple

processes in the program and display translated trace information on the display

screen to allow the user to analyze the execution of the program. Variables and

memory values can also be traced. The user can view variable values as in an

ordinary debugger. The variables may include function arguments, the C++ "this"

pointer, function return values, local variables, global variables, static variables, etc.

The data to which a pointer is pointing can also be traced. Tracking of

variables in memory is accomplished by first analyzing the debug information to

find the address (global, static, stack, or dynamic address) of the variable

and the data it holds.

Regarding independent claim 11 and dependent claim 12:

Wygodny teaches a program analyzer that provides a graphical representation

of the collected (analyzed) data showing program flow (hierarchy), program calls, and

I/O information. (figure 3A, 3B, 5-7, 13-14) The analyzed data is stored in a database

that can be read out in method that is predetermined the operators inputs.

Regarding independent claim 13 and dependent claims 14 –21:

Wygodny teaches a program analyzer which collects trace information for use in

analyzing a computer program. (a "trace" refers to the analysis information being

obtained) Trace data is collected and stored according to instructions in a trace options

file that is set up through an interactive process by the operator and is hence

predetermined. A representation of program flow, calls, I/O and their related

dependence is also taught. (figure 3A, 3B, 5-7, 13-14)

Regarding independent claim 22 and dependent claim 23:

Wogoby teaches a software analysis method where the user may analyze trace data (collected analysis information) based on data stored in a trace log file (predetermined) which shows the sequence of events and provides a comprehensive string that are meaningful to the user. The user defines analysis objectives according to instructions in a trace options file that is set up through an interactive process by the operator. (CL7-L39-67)

Regarding independent claim 24 and dependent claims 25-32:

Claims 24-32 simply claim a recording medium for the apparatus described in claims 1-10. Wygodny teaches a computer program (and readable recording medium) for a program analysis information generation function and generates program analysis information. (figure 3A, 3B, 5-7, 13-14) Computer readable storage mediums such as hard drives, floppy drives, and associate file servers are considered to simply be old and well known methods of storing computer data.

Regarding independent claim 33 and dependent claim 34:

Claims 33 and 34 simply claim a recording medium for the analysis method described in claims 22 and 23. Computer readable storage mediums such as hard drives, floppy drives, and associate file servers are considered to simply be old and well known methods of storing computer data. Object-oriented database techniques are old and well known methods of database construction.

While Wygodny teaches a program analyzer with features that exceed the capabilities of the claimed invention, it substantially incorporates the features of the claimed invention as a subset.

Conclusion

6.   *The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, careful consideration should be given prior to applicant's response to this Office Action.*

U.S. Patent 5,778,212 issued to Dehnert et al teaches interprocedural analysis using a standard compilation user interface.

U.S. Patent 5,892,947 issued to DeLong et al teaches test support tool system and method for software programs.

U.S. Patent 5,963,739 issued to Homeier teaches a method for verifying the total correctness of a program.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 703-305-9670 and whose normal working hours are 8:30am to 5:00pm Monday to Friday.
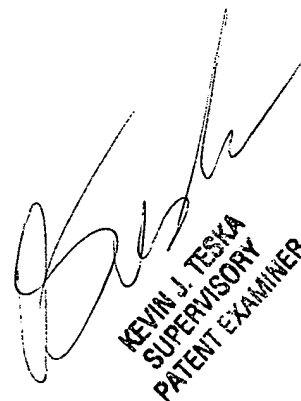
Any inquiry of a general nature relating to the status of this application should b directed to the group receptionist whose telephone number is 703-305-3900.

The Official Fax Numbers are:

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